

ABSTRACT OF THE DISCLOSURE

A hydrogen storage tank includes a housing, and a heat exchanger provided within the housing. The heat exchanger has an upstream side heat transfer pipe formed flatly, a downstream side heat transfer pipe formed flatly, and a connection pipe for connecting the two heat transfer pipes to each other. The heat exchanger has a plurality of fins which are formed between the two heat transfer pipes so as to extend along the lengthwise direction of the two heat transfer pipes. A composite of granular MH powder and flaky aluminum powder is stored in the housing in the condition that the composite is in contact with the two heat transfer pipes and the fins. For example, powder of a rare-earth alloy (MmNi₅) having a particle size of not larger than 500 μm is used as the MH powder. For example, flaky aluminum powder having a mean particle size of 80 μm and a thickness of 0.5 μm to 2 μm is used as the flaky aluminum powder. The two kinds of powder are mixed so that the amount of the flaky aluminum powder is in a range of from 2 % by volume to 11 % by volume.